PARCEL B13
CORRECTIVE MEASURES STUDY
INVESTIGATION WORK PLAN

TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

Prepared For:

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Revision 0 – March 15, 2021

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1.0 INTRODUCTION

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic (TPA), has prepared this Corrective Measures Study (CMS) Investigation Work Plan which proposes additional soil and groundwater sampling to more fully characterize known impacts in the eastern portion of Parcel B13 (the Site), which is located on a peninsula in the southeastern portion of the TPA property. A Stockpile Beneficial Reuse Plan for Parcel B13 (Revision 0 dated December 28, 2020) was submitted to the Maryland Department of the Environment (MDE) and United States Environmental Protection Agency (USEPA) to propose reuse of four slag stockpiles located on Parcel B13. The USEPA has requested (through comments received via email on February 5, 2021), that a CMS Investigation Work Plan summarize existing Site impacts and propose additional investigation prior to preparation of a CMS Report that will address slag placement in the area. This CMS Investigation Work Plan also provides a *draft* Corrective Action Objective (CAO) chart that specify the actions needed for implementation of the final remedies at the Site. The CAO chart may be subject to future revision with input anticipated by the Agencies.

2.0 CURRENT CONDITIONS

2.1 SITE SETTING AND USE

The TPA property is located in Baltimore County, Maryland within the southeastern corner of the Baltimore metropolitan area, and approximately nine miles from downtown. The property encompasses approximately 3,100 acres of land located on a peninsula situated on the Patapsco River near its confluence with the Chesapeake Bay, and physically positioned in the mouth of the heavily industrialized and urbanized Baltimore Harbor / Patapsco River region. **Figure 1** shows the location and boundaries of the TPA property.

From the late 1800s until 2012, the property was used for the production and manufacturing of steel. Iron and steel production operations and processes at the TPA property included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steelmaking operations at the Sparrows Point facility ceased in fall 2012, and the steel mill has since been demolished. Current plans for the TPA property include redevelopment over the next several years. Some portions of the TPA property have already undergone remediation and/or redevelopment.

Parcel B13 is located in the southeastern portion of the TPA property. Previous investigations and slag recovery efforts on Parcel B13 have identified non-aqueous phase liquid (NAPL) and naphthalene impacts within the eastern portion of the Site. **Figure 2** shows the location of these previously documented impacts, which have been described in detail in various environmental reports referenced below. The parcel is currently zoned Manufacturing Heavy-Industrial Major (MH-IM) and current uses on the Site include reclamation, stockpiling, and processing of slag. There is currently no groundwater use within the parcel or on the greater TPA property.

To date, approximately 15 vertical feet of slag has been reclaimed in the southeastern portion of Parcel B5 and northeastern portion of Parcel B13, totaling an area of approximately 600,000 square feet. The current approximate ground surface elevations are shown as topographic contours on **Figure 2**. Additional slag reclamation is planned to the south of the suspected contaminated area in the eastern portion of Parcel B13.

2.2 NATURE AND EXTENT OF CONTAMINATION

The nature and extent of contamination at the Site will be further characterized as part of the proposed CMS Investigation. This section summarizes previous observations of NAPL and naphthalene impacts at the Site.

Elevated concentrations of naphthalene and physical evidence of NAPL were observed at soil boring B13-073-SB as part of the Parcel B13 Phase II Investigation. The sample collected from

a depth of 7 feet below ground surface (bgs) at this location had a detection of naphthalene at 1,970 mg/kg, and a strong chemical/mothball-like odor and greasy feel were noted throughout the boring. Therefore, NAPL delineation piezometers were installed and gauged. Delineation of NAPL was conducted and reported as part of the Parcel B13 Phase II Investigation Report (Revision 0 dated April 19, 2017) and Delineation Completion Report for B13-073-PZ (dated January 22, 2018; included as an electronic attachment). This NAPL-impacted area has been fully delineated as reported in the Completion Report.

During the Parcel B13 Phase II Investigation, an elevated aqueous concentration of naphthalene and subsequent trace NAPL were identified at piezometer B13-078-PZ. As described in the NAPL Delineation Letter for B13-078-PZ (dated December 15, 2017; included as an electronic attachment), the attempt to delineate the extent of NAPL at this location failed due to refusal prior to reaching groundwater at all four proposed delineation locations. This CMS Investigation Work Plan proposes additional delineation work in this area, as shown on **Figure 3**.

In 2019, MCM Management Corp. (MCM) under contract to DXI began site grading (slag reclamation) activities in the northeastern portion of Parcel B13, which then progressed toward the south. Slag reclamation activities included removing approximately 15 feet of slag from the ground surface to be processed and then repurposed in ongoing and future construction projects throughout the TPA property. In mid-May 2019, MCM operators uncovered a vein of slag within the face of a cut that exhibited strong olfactory indications of naphthalene contamination. Additionally, four slag stockpiles at the Site produced notable odors and subsequent sampling found these stockpiles to contain elevated concentrations of naphthalene. The full results of this stockpile sampling were reported in the Stockpile Reuse Plan (Revision 0 dated October 9, 2019).

The impacted slag area is shown on **Figure 2**. Subsequent soil boring and test pitting activities were conducted to delineate the extent of impacts to the south of the cut face. Delineation activities were only conducted to a depth of approximately 18 bgs, at an elevation of 14 feet above mean sea level (amsl), and no groundwater was encountered. The objective of the investigation was to evaluate conditions in material available for potential future reclamation, not to evaluate the full extent of potential impacts down to and within the groundwater or below the water table. The results of these activities are summarized in the Slag Characterization Completion Report (Revision 1 dated September 14, 2020; included as an electronic attachment). This CMS Investigation Work Plan proposes to characterize groundwater both north and south of the cut face.

On December 28, 2020, TPA proposed to use the slag stockpiles as backfill (and then subsequently cap the area) to restore a pit located on Parcel B5 and Parcel B13 that was created from the reclamation of additional slag material. Following USEPA feedback received via email on February 5, 2021, the reuse of the slag will likely be proposed as part of an overall CMS for the Site. This CMS Investigation Work Plan proposes additional soil and groundwater

investigation which will provide supplemental data to help determine an appropriate method for slag reuse. The findings will be presented in a CMS Report.

3.0 FIELD ACTIVITIES AND PROCEDURES

3.1 UTILITY CLEARANCE

ARM will take appropriate precautions to avoid subsurface utilities and structures during the site investigation. Prior to initiating any subsurface investigations, the drilling subcontractor will attempt to determine the location of utilities in the project area using the Miss Utility system. Additionally, any required state or local permits will be acquired prior to the commencement of site activities.

In addition to the Miss Utility system, TPA will clear each proposed boring with utility personnel currently working on the property. To facilitate this, ARM will locate with a GPS and mark all proposed sample locations in the field. ARM will coordinate the staking of sample locations in the field with TPA utility personnel to avoid conflicts. Historical utility drawings which may be relevant include the 5600 Set (Plant Water Lines) and 5800 Set (Plant Gas Lines).

3.2 SAMPLING PLAN

The purpose of this Site characterization is to further characterize known impacts located in the eastern portion of Parcel B13 and to identify a suitable location for impacted slag reuse. This CMS Investigation Work Plan presents the methods and protocols to be used to complete the characterization. These methods and procedures follow the MDE's Voluntary Cleanup Program (VCP) and USEPA guidelines. Information regarding the project organization, field activities and sampling methods, sampling equipment, sample handling and management procedures, the laboratory analytical methods and selected laboratory, quality control and quality assurance procedures, investigation-derived waste (IDW) management methods, and reporting requirements are described in detail in the Quality Assurance Project Plan (QAPP dated April 5, 2016) that has been developed to support the investigation and remediation of the TPA property. All site characterization activities will be conducted under the TPA property-wide Health & Safety Plan (HASP) provided as an electronic attachment.

3.2.1 Groundwater Investigation

Groundwater samples will be collected from 2-inch diameter temporary groundwater sample collection points (piezometers) within Parcel B13 at the locations shown on **Figure 3**. Each piezometer will be installed using a sonic rig, in accordance with the procedures referenced in the QAPP Worksheet 21 – Field Standard Operating Procedures (SOPs), SOP No. 028 – Direct Push Installation and Construction of Temporary Groundwater Sample Collection Points. The groundwater samples will be collected in accordance with procedures referenced in the QAPP Worksheet 21 – Field SOPs, SOP No. 006 – Groundwater Sampling. All groundwater samples will be analyzed for VOCs and SVOCs. Analytical methods, sample containers, preservatives,

and holding times for the sample analyses are listed in the QAPP Worksheet 19 & 30 – Sample Containers, Preservation, and Holding Times.

The proposed piezometers will be surveyed by a Maryland-licensed surveyor, and a synoptic round of groundwater level measurements will be collected from the piezometers. A groundwater potentiometric surface map will be constructed for the shallow hydrogeologic zone based on the survey and field gauging measurements.

Prior to sample collection, each piezometer will be checked for the presence of NAPL using an oil-water interface probe, in accordance with methods referenced in the QAPP Worksheet 21 – Field SOPs, SOP No. 019 – Depth to Groundwater and NAPL Measurements. Once each PVC piezometer has been sampled, surveyed and/or checked for NAPL, it will be removed and discarded. The boreholes will then be abandoned in accordance with Maryland abandonment standards as stated in COMAR 26.04.04.34 through 36.

3.2.2 Soil Investigation

Due to the known naphthalene impacts at the Site, soil screening will be conducted at each of the proposed groundwater sample locations shown on **Figure 3**. During the soil logging associated with piezometer installation, if significant visual or olfactory evidence of soil impacts or elevated photoionization detector (PID) readings above 10 ppm are encountered, soil samples will be collected from corresponding intervals and analyzed for VOCs and SVOCs. A maximum of one sample will be collected from each applicable 10-foot interval.

Based on agency feedback, supplemental Phase II Investigation soil sampling is required to provide data coverage of the planned post-reclamation conditions. A number of previous Parcel B5 and Parcel B13 Phase II soil samples were collected in slag that has since been recovered or in slag where future recovery is planned. Therefore, proposed additional sampling will characterize Site conditions while taking into account these slag reclamation activities. Proposed sampling is limited to the investigation area; however, additional supplemental Phase II Investigation soil sampling within Parcel B5 and/or Parcel B13 may be necessary and would be proposed under separate cover.

Soil samples collected from the four locations identified on **Figure 4** will be screened and analyzed in accordance with procedures referenced in the QAPP Worksheet 21 – Field SOPs, SOP No. 009 – Sub-Surface Soil Sampling. Regarding soil sampling depth, a shallow sample will be collected from the 0 to 1 foot depth interval, and a deeper sample will be collected from the 4 to 5 foot depth interval. Because additional slag reclamation activities are planned at the two southern-most soil boring locations, sampling intervals will be shifted so that the "0 to 1 foot" depth interval below final grade (bfg) will be at the planned final site grade of 11 to 12 feet amsl. Soil samples will be analyzed for SVOCs, TAL-Metals, Oil & Grease, TPH-DRO, TPH-GRO, hexavalent chromium, and cyanide. Samples from any depth interval with a sustained PID reading of greater than 10

ppm will also be analyzed for VOCs. Additionally, the soil sample collected from the shallow interval (0 to 1 foot bfg) will be analyzed for PCBs. If the PID or other field observations indicate contamination to exist at a depth greater than 3 feet bfg but less than 9 feet bfg, and above the water table, the sample from the deeper 4 to 5 foot interval may be shifted to the depth interval indicated by the PID response. One additional sample will also be collected from the 9 to 10 foot depth interval if groundwater has not been encountered. It should be noted that no Phase II Investigation soil samples will be collected from a depth below the water table.

If the PID reading from the 9 to 10 foot depth interval is less than 10 ppm, all parameters will be held by the laboratory pending the analysis of the 0 to 1 and 4 to 5 foot depth interval samples. If this depth interval exhibits a sustained PID reading of 10 ppm, it will be analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and Oil & Grease. However, the samples for metals and cyanide will be held by the laboratory pending the analysis of the 0 to 1 and 4 to 5 foot depth interval samples. If the analyses from the 4 to 5 foot depth interval show exceedances of PALs for any constituent, the held sample from the 9 to 10 foot depth interval will be analyzed for those constituents that exhibited PAL exceedances in the overlying 4 to 5 foot sample.

In an effort to identify the base of non-native slag fill at the Site, one exploratory soil boring, shown on **Figure 4**, will extend through the slag fill to a depth of at last 5 feet into the underlying native fill (sediment) or a maximum of 75 feet bgs. This will allow for characterization of the native sediment and investigation of potential dense NAPL (DNAPL) impacts in the area. Soil sampling will be conducted as described above if significant visual or olfactory evidence of soil impacts or elevated PID readings above 10 ppm are encountered. The over-drilled portion of the boring will be backfilled with grout using a tremie pipe and then sealed with 2 feet of bentonite pellets followed by 3 feet of sand prior to piezometer installation at a standard depth.

After drilling has been concluded at a location, all down-hole soil sampling equipment will be decontaminated according to procedures referenced in the QAPP Worksheet 21 – Field SOPs, SOP No. 016 – Equipment Decontamination. The decontamination procedures that will be used during the course of this investigation include Decontamination of Sampling Equipment (Section 3.5 of the SOP), Decontamination of Measurement Devices & Monitoring Equipment (Section 3.7), Decontamination of Subsurface Drilling Equipment (Section 3.8), and Document and Record Keeping (Section 5). Analytical methods, sample containers, preservatives, and holding times for the sample analyses are listed in the QAPP Worksheet 19 & 30 – Sample Containers, Preservation, and Holding Times.

3.2.3 NAPL Delineation

As described previously, trace NAPL was identified in historical piezometer B13-078-PZ; however, subsequent delineation at this location was unsuccessful. This CMS Investigation Work Plan proposes to reinstall a piezometer at location B13-078-PZ, which will be sampled for groundwater as described in the previous section. In addition, three NAPL delineation piezometers

will be installed to investigate potential NAPL impacts at this location. Gauging of these piezometers will be completed at standard intervals as described below. A piezometer will also be reinstalled at B13-073-PZ, a location where NAPL was previously observed. If a recoverable amount of NAPL is identified at B13-073-PZ, a sample will be collected for hydrocarbon matching analysis to be performed by Torkelson Geochemistry, Inc. Likewise, if NAPL is observed in B13-078-PZ, or in any other proposed piezometer, and the NAPL appears to be distinct from other observed NAPL in the investigation area (based on color, viscosity, odor, etc.), a sample may also be collected for hydrocarbon matching analysis.

The MDE will be notified of any initial observation of NAPL bearing soils identified in a soil boring within 2 hours of the field observation. This notification will be provided in email format to appropriate MDE representatives. Since NAPL was previously identified at B13-073-PZ, B13-078-PZ, and the suspected contaminated area (shown in purple on the sampling figures), MDE notification will not be required for observances in these locations. Subsequent observations of NAPL bearing soils in the same immediate area will not require redundant notifications. For the purposes of this notification, NAPL bearing soil is defined as soil containing free oil (i.e., liquid oil which could potentially be drained or otherwise extracted from the soil). If minor indications of NAPL (globules or a sheen) are identified in the soil core, it will be delineated in accordance with the procedures listed below, but the initial 2-hour MDE notification will not be required (unless NAPL bearing soils are identified during the subsequent delineation). If the MDE has not previously been notified due to the presence of NAPL bearing soils, the presence of measurable NAPL in a temporary piezometer will warrant the same 2-hour MDE notification and subsequent delineation. If the evidence of NAPL is limited to a trace detection, the potential impacts will be delineated but the initial 2-hour MDE notification will not be required.

Temporary piezometers will be installed according to the specifications identified in SOP No. 028 – Direct Push Installation and Construction of Temporary Groundwater Sample Collection Points. ARM will immediately check the piezometers for the presence of NAPL using an oil-water interface probe in accordance with methods referenced in SOP No. 019 – Depth to Groundwater and NAPL Measurements. Each piezometer installed to delineate the presence or absence of NAPL will be checked with an oil-water interface probe immediately after installation, 48 hours after installation, and 30 days after installation. If NAPL is not detected after 30 days of equilibration time, the screening piezometer will be emptied, removed, and discarded, and the borehole will be abandoned in accordance with Maryland abandonment standards as stated in COMAR 26.04.04.34 through 36.

If measurable NAPL or sheen is present in the initial piezometer, ARM will remobilize (following utility clearance) to install and inspect additional soil borings and delineation piezometers to further characterize the impact with offsetting points initially at distances of approximately 25 feet. If multiple proximate NAPL detections are observed, a more coordinated delineation of the identified area may be proposed. Delineation piezometers will extend into adjacent parcels (as

applicable) but will only be installed up to the edge of existing buildings. At each location, the continuous soil cores will be screened with a hand-held PID and inspected for evidence of NAPL, and the additional temporary piezometers will be installed to a final depth determined by ARM personnel.

Each additional piezometer installed to delineate the NAPL will be checked for the presence of product with an oil-water interface probe immediately after installation, 48 hours after installation, and again after a 30 day equilibration period. If NAPL is present within any of the piezometers, additional borings/piezometers will be added as necessary to complete the delineation. Once the MDE has given approval to abandon the additional piezometers, each piezometer will be removed and discarded. All boreholes will be abandoned in accordance with COMAR 26.04.04.34 through 36. The CMS Report will include the results of all delineations, including NAPL thickness.

4.0 CORRECTIVE MEASURES OBJECTIVES

Based on the USEPA comments received on February 5, 2021, the Resource Conservation and Recovery Act (RCRA) allows for certain discrete areas of generally dispersed contamination to be considered Areas of Contamination (AOCs) equivalent to a RCRA land-based unit, such that consolidation or in situ treatment of remediation waste found in or on the land can occur within the AOC without triggering land disposal restrictions or minimum technology requirements. It is possible that the impacted slag reclamation area could be considered an AOC, allowing consolidation and/or in situ treatment of the naphthalene/slag remediation waste within that AOC. Definition and boundaries of this potential AOC will be provided as part of the CMS Report.

4.1 CORRECTIVE ACTION OBJECTIVES

USEPA expects final remedies to maximize beneficial use, where practicable, within a timeframe that is reasonable. Where returning contaminated groundwater to its maximum beneficial use is not technically practicable, USEPA generally expects facilities to prevent or minimize the further migration of a plume, prevent exposure to the contaminated groundwater, and evaluate further risk reduction. Technical impracticability (TI) for contaminated groundwater refers to a situation where achieving groundwater cleanup levels associated with final cleanup standards is not practicable from an engineering perspective. The term "engineering perspective" refers to factors such as feasibility, reliability, scale or magnitude of a project, and safety.

CAOs for Parcel B13 are defined as follows:

(1) control releases of constituents of potential concern (COPCs) to the atmosphere and groundwater to the extent practicable,

(2) control human exposure to the hazardous constituents,

(3) ensure that slag containing elevated concentrations of COPCs will not adversely impact ecological receptors nor adjacent surface water and pore water quality, and

(4) return contaminated slag to cleanup levels based on its maximum beneficial use, to the extent practicable.

A worksheet summarizing the *draft* CAOs is included as **Appendix A.**

5.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

5.1 PROJECT PERSONNEL

The CMS Investigation Work Plan will be implemented by ARM under a contract with TPA. The TPA Project Manager is Mr. Robert Tworkowski. Mr. Tworkowski will be responsible for ensuring the availability of resources for the project and will be the primary point of contact with the regulatory agencies.

The ARM Project Manager, Mr. Eric Magdar, P.G., is responsible for ensuring that activities are conducted in accordance with this CMS Investigation Work Plan and the contract requirements. Mr. Magdar is a registered Professional Geologist and has served as Project Manager on numerous remediation projects. As Project Manager, Mr. Magdar will be responsible for technical direction of ARM's team of engineers and geologists, directing daily project activities, tracking project schedule, and providing quality assurance. Mr. Magdar will provide technical coordination with the MDE, USEPA and TPA.

5.2 PROJECT SCHEDULE

The additional data collection is anticipated to require approximately 8 weeks (including preparation, mobilization, fieldwork, and laboratory analysis) after agency approval. The anticipated schedule for completion of the CMS Report is 6 weeks following the receipt of the data from the activities proposed as part of this CMS Investigation Work Plan.

Task	Proposed Completion Date
CMS Investigation Work Plan Approval	April 1, 2021
Field Activities Implementation	April 2021
CMS Report Submission	July 2021
CMS Report Approval	August 2021
CMS Remedy Implementation	December 2021
Submittal of Implementation Completion Report	January 2022

FIGURES

Site Boundary

Parcel Boundaries

Private Property

Parcel A9
Parcel A5
Parcel A13
Parcel A7
Parcel A14
Parcel A8
Parcel A11
Parcel A12
Parcel A2
Parcel A15
Parcel A17
Parcel A18
Parcel A16
Parcel A6
Parcel A4
Parcel A10
Parcel A3
Parcel A1
Parcel B6
Parcel B8
Parcel B14
Parcel B22
Parcel B16
Parcel B21
Parcel B15
Parcel B24
Parcel B23
Parcel B25
Parcel B7
Parcel B1
Parcel B2
Parcel B3
Parcel B17
Parcel B19
Parcel B4
Parcel B5
Parcel B9
Parcel B18
Parcel B10
Parcel B13
Parcel B20
Parcel B11
Parcel B12

Tradepoint Atlantic
Area A and Area B Parcels

September 22, 2020

Figure
1

N

ARM Group LLC
Engineers and Scientists

0 500 1,000 2,000
Feet

Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

Area A: Project 200101
Area B: Project 200102

Parcel B9

Parcel B5

Parcel B13

Parcel B20

Topographic Contours in ft amsl

- Slag Stockpiles
- Potential Slag Reuse Area
- Suspected Contaminated Area
- Exposed Slag Material with Temporary Cover
- NAPL Delineation (B13-073 Area)
- Parcel Boundary

Parcel B13 Slag Reclamation Area
Aerial Image with Topographic Flyover
February 5, 2021

Figure 2

ARM Group LLC
Engineers and Scientists

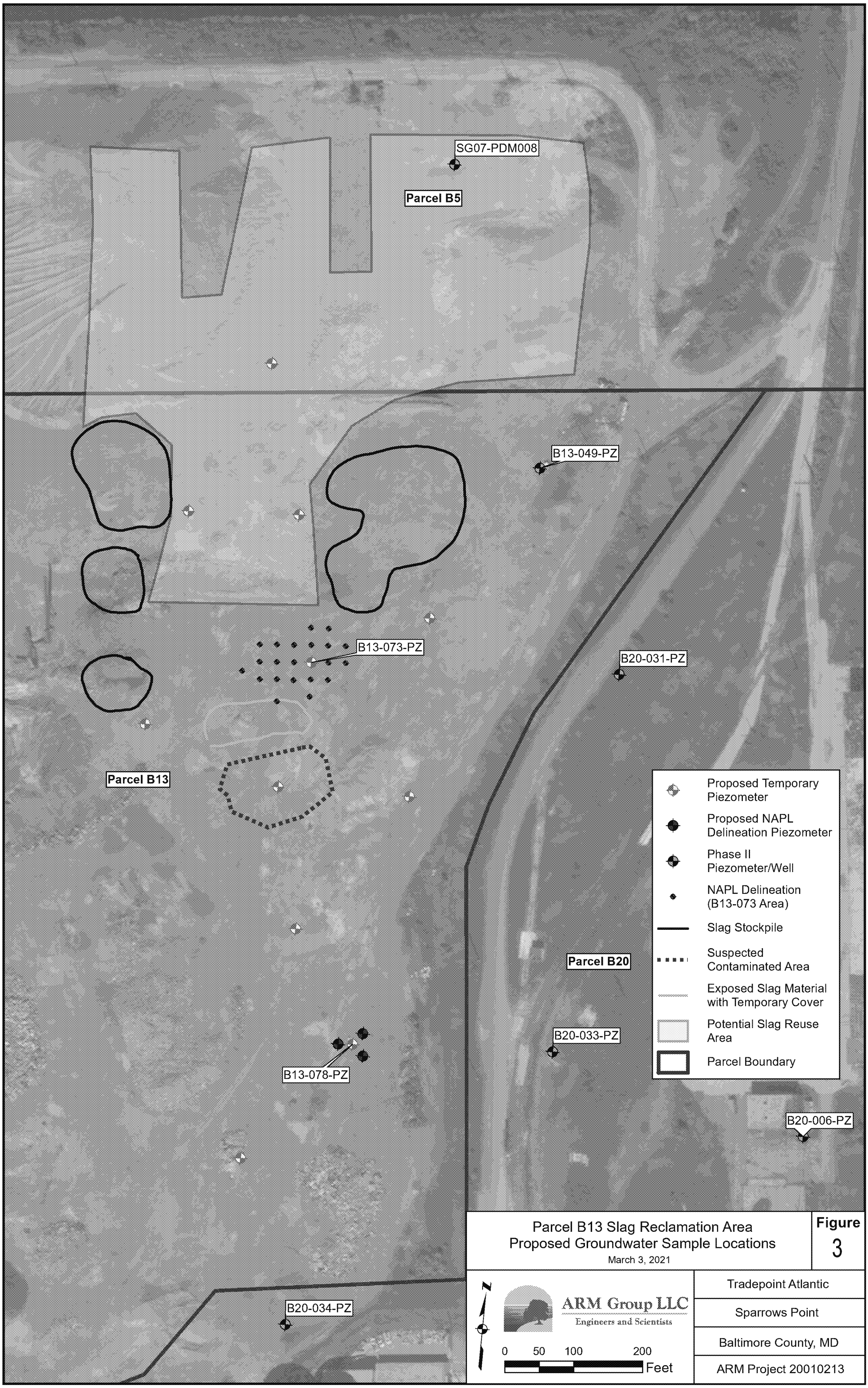
0 125 250 500

Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

ARM Project 20010213



Parcel B13 Slag Reclamation Area
Proposed Groundwater Sample Locations
March 3, 2021

Figure 3

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 20010213

Parcel B5

Parcel B13

Parcel B20

- Proposed Soil Boring
- Proposed Soil Boring (Phase II Sampling)
- Proposed Exploratory Soil Boring
- NAPL Delineation (B13-073 Area)
- Slag Stockpile
- Suspected Contaminated Area
- Exposed Slag Material with Temporary Cover
- Potential Slag Reuse Area
- Parcel Boundary

Parcel B13 Slag Reclamation Area
Proposed Soil Sample Locations

March 12, 2021

Figure 4

ARM Group LLC
Engineers and Scientists

0 50 100 200 Feet

Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

ARM Project 20010213

APPENDIX A

Corrective Action Objectives Worksheet for Parcel B13 CMS

Instructions: *Record corrective action objectives in this form based on the environmental media and relevant impacts. For each objective, indicate the relative priority / time frame for completion on a 1-4 scale: 1 = Short-term; 2 = Intermediate; 3 = Long-term final cleanup; 4 = Existing control in place*

Environmental Media	Corrective Action Objectives				
	Human Health Residential	**Human Health Non-Residential**	**Ecological Receptors**	**Cross-media Transfer**	**Resource Restoration**
Groundwater	Prevent potable use of groundwater Entire facility is currently zoned Manufacturing Heavy-Industrial Major. Residential use of property & potable GW use to be prohibited via future covenant.	YES, develop objective for: >Direct contact during construction excavation >Prevent potable use of groundwater (Future environmental covenant(s) to prohibit GW use)	N/A – no direct ecological exposure to groundwater	YES - develop objective (cleanup level & point of compliance) for: GW -> indoor air (VI) Not applicable - perimeter wells are below NRWQLs GW -> pore water GW -> surface water	YES – develop objective for industrial water use and discharge
Soil	Not applicable. Entire facility is currently zoned Manufacturing Heavy-Industrial Major. Residential use of property to be prohibited via future covenant.	To be assessed within RADWPs	To be assessed within RADWPs	YES – develop objective for: Soil -> GW Soil -> Air	YES – develop objective (cleanup level & point of compliance) for maximum beneficial uses of impacted slag under capped area
Surface Water/Pore Water/Sediment	Parcels currently zoned Manufacturing Heavy-Industrial Major. Residential use of property to be prohibited via future covenant.	Not applicable - perimeter wells are below NRWQLs	Not applicable - perimeter wells are below NRWQLs	– Addressed by groundwater cross-media transfer objective	Not applicable
Air	Not applicable. Entire facility is currently zoned Manufacturing Heavy-Industrial Major. Residential use of property to be prohibited via future covenant(s).	YES – develop objective for naphthalene odors VI to be assessed within RADWPs	Not applicable	Not applicable	Not applicable
Waste	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
NAPL	Not applicable. Entire facility is currently zoned Manufacturing Heavy-Industrial Major. Residential use of property to be prohibited via future covenant(s).	YES, develop objective for: Direct contact during excavation	Not applicable	YES – develop objective for: NAPL -> GW NAPL -> Indoor air (VI)	NAPL must be removed to the maximum extent possible per Maryland Oil Control Program in conjunction with EPA technical impracticability criteria.